

To: Unlawful Diversion Investigation Team
From: Michael George
Date: August 16, 2021
Re: Investigation Next Steps

Premise: Through two meetings with Complainants (and interim work on technical issues) we have developed a common understanding with the Complainants about the range of uncertainties in data and derived assumptions supporting their mass balance methodology. Notwithstanding the embedded uncertainties, we need to move forward, in cooperation with the Complainants, to the next phase of the investigation: disaggregating the contributors to the gross Delta depletions estimated by the mass balance analysis.

- I. A mass balance analysis (inflow – outflow – export = in-Delta depletion) is insufficient to determine unlawful use.
- a. The complaint purports to be a *prima facie* showing of unlawful diversion of stored water released by the Projects.
 - b. As noted in the technical meeting (7/30), there is insufficient data to conclude that Delta inflows during the period from May to date are exclusively previously stored water released by the Projects; however, the data are sufficient to demonstrate that the inflows do not include “natural flow” sufficient to meet the riparian demand in the Delta.
 - c. The mass balance approach only estimates in-Delta depletions; it does not identify the nature of those depletions, nor quantify the portion of the total grossly estimated depletions properly allocated to each type.
 - d. Depletions may be conceptually divided among:
 1. Evapotranspiration by:
 - a. Crops
 - b. Riparian and other natural vegetation
 - c. Aquatic weeds
 2. Evaporation from open water
 3. Loss to groundwater
 4. Other?
 - e. Focus next on the subset of depletions that serve the crop ET beneficial use.
 - f. It is useful to further differentiate crop ET depletions according to method of surface water diversion:
 1. Active (through a siphon, pump or other control structure)
 2. Tailwater capture and reapplication
 3. Passive (seepage?)

- II. Once depletions are understood, quantified and allocated to the extent practical:
- a. Identify diversions subject to management action (voluntary or regulatory curtailment)
 - 1. Cease & Desist Order (but see Order WR 2016-0015 (June 7, 2016) (dismissing curtailment enforcement action against BBID/WSID)
 - 2. Emergency Regulation (but see Unavailability Methodology §2.3.3 indicating that the data currently available are not yet sufficiently robust to support curtailment orders against colorable riparian claims in the Legal Delta)
 - b. Identify the subset likely to revert to back-up supply contracts:
 - 1. North Delta Water Agency (SWP)
 - 2. East Contra Costa Irrigation District (SWP)
 - 3. Contra Costa Water District (CVP)
 - 4. City of Antioch (quasi DWR)
 - 5. Contracts with South San Joaquin Irrigation District through South Delta Water Agency on behalf of selected licensees (but consider effect of curtailment of the underlying SSJID pre-1914 water right)
 - 6. Contracts with public wastewater treatment plants (Tracy WWTP to BBID?)
 - c. Identify the residual subset of active diversions potentially subject to curtailment
 - 1. Central Delta Water Agency diversions south and west of the San Joaquin River
 - 2. Portion of Contra Costa County (ex-ECCID) west of Old River not served by municipal systems (primarily Webb, Holland, Veale, and Palm-Orwood Tracts and Bradford and Coney Islands)
 - 3. South Delta Water Agency (ex- contracts)

Potential Legal Issues [To Come]